

## WE CLAIM:

1           1.     A method for dynamically providing information to a user via a visual display  
2 associated with a user computer, the method comprising the following steps:  
3                 assigning the user a user identification code;  
4                 assigning an application code to at least a first website and a second website to be  
5 viewed by said user;  
6                 recording the user's activity associated with said first and second websites by  
7 monitoring said user identification code and said application code;  
8                 determining the user's viewing preference associated with said first website based  
9 on the user's activity associated with said first website;  
10                determining the user's viewing preference associated with said second website  
11 based on the user's activity associated with said second website; and  
12                dynamically adjusting the user's display in accordance with the user's preference  
13 associated with the website being viewed by the user.

1           2.     The method of claim 1, further comprising the step of downloading from a system  
2 server a display application for each website where the user's activity is to be recorded.

1           3.     The method of claim 2, further comprising the step of utilizing a message broker  
2 to handle communications between said server and said display application.

1           4.     The method of claim 2, further comprising the step of utilizing a message broker  
2 to handle communications between said server and other applications associated with said user  
3 computer.

1           5.     The method of claim 1, wherein the recording step comprises the further step of  
2 recording a URL associated with the website being viewed by said user.

1           6.     The method of claim 1, wherein said visual display includes a browser function  
2 and said adjusting step adjusts the browser.

1           7.     The method of claim 1, further comprising the step of generating a user  
2 information record associated with each user, the user information record including the user  
3 identification code, an IP address field indicating the last internet address from which the user  
4 communicated, a country code field indicating the country from which the user last  
5 communicated, and a last login field indicating the last time that the user communicated.

1           8.     The method of claim 7, further comprising the step of customizing information  
2 presented to a user in accordance with the country code field associated with the user.

1           9.     The method of claim 1, further comprising the step of generating a user session  
2 record associated with a communication session with the user, the user session record including  
3 the user identification code or a similar unique identifier associated with the user, the application  
4 code associated with a website, an IP address field indicating the last internet address from which  
5 the user communicated, session timing information, and a unique session identification code.

1           10.    The method of claim 9, wherein said session timing information includes a  
2 session start time and a session end time.

1           11.    The method of claim 10, further comprising the step of generating user-specific  
2 statistics including user session duration and peak time of use.

1           12.    The method of claim 10, further comprising the step of generating average user  
2 session duration, average client session duration, user session peak time of use and client session  
3 peak time of use for a plurality of users.

1           13.    The method of claim 1, further comprising the step of generating a session  
2    identifier for tracking application activities, the session identifier including the application code  
3    associated with the website and an application name field indicating the textual name associated  
4    with the website.

1           14.    The method of claim 13, further comprising the step of transmitting messages to  
2    be displayed the user, and wherein the session identifier further includes an application message  
3    interval field indicating a period of time between messages sent from a message queue to the  
4    application, a welcome wait interval which indicates an amount of time to wait before requesting  
5    a next display message from the message queue, and a query time interval which indicates a  
6    period of time between application queries for additional information.

1           15.    The method of claim 1, further comprising the step of generating an application  
2    navigation record indicating the primary location the process initially accesses when the process  
3    is first executed, the application navigation record including the application code, a navigation  
4    URL field indicating a web address to be initially accessed upon initial execution, a country code  
5    field indicating the user's country for which the URL navigation field is applicable.

1           16.    The method of claim 1, further comprising the step of generating an application  
2    customization record which includes application parameters related to user behavior, the

3 application customization record including the application code, a user behavior type indicator,  
4 and a tag name field and value name field which provide a textual information tag and an  
5 associated value, respectively, for the application.

1 17. The method of claim 16, further comprising the step of customizing the user's  
2 display in accordance with the user behavior type.

1 18. The method of claim 1, further comprising the step of generating a user behavior  
2 information record indicating weighted information about the user's behavior, the user behavior  
3 information record including the user identification code or a similar unique identifier associated  
4 with the user, a behavior type field indicating information about the user's type of interests, and a  
5 weight field indicating the appropriate weighting or significance of each user behavior type.

1 19. The method of claim 18, further comprising the step of generating a plurality of  
2 use behavior information records, and utilizing the plurality of user behavior information records  
3 to perform additional customization of the user's display.

1 20. The method of claim 1 further comprising the step of generating a user URL  
2 information record which indicates user URL tracking information used to generate user behavior  
3 information, the user URL information record including the user identification code or a similar

4 unique identifier associated with the user, a session identifier which identifies the session of the  
5 user for a particular URL, a domain field and page field associated with the particular URL, a  
6 page type field which identifies the type of URL, and a duration field which indicates an amount  
7 of time the user spent at a particular URL.

1 21. The method of claim 20, further comprising the step of utilizing user URL  
2 information records to generate user behavior statistics, including at least one of total and  
3 average number of times the user visited a particular URL, the total and average time the user  
4 spent at a particular URL, the peak time when the user visited a particular URL, and the types of  
5 pages viewed by the user.

1 22. The method of claim 20, further comprising the step of utilizing user URL  
2 information records to generate URL statistics, including at least one of total and average number  
3 of times that users visited a particular URL, the total and average time users spent at a particular  
4 URL, and the peak time when users visited a particular URL.

1 23. The method of claim 20, further comprising the step of utilizing user URL  
2 information records to customize the user's display.

1           24.    The method of claim 1, further comprising the step of generating a user  
2 application information record indicating information associated with client applications the user  
3 has downloaded, the user application information record including the user identification code or  
4 a similar unique identifier associated with the user, the application code for each particular  
5 application downloaded by the user, an application version field identifying the current version of  
6 each particular application, a download date field indicating the date the user downloaded the  
7 particular application.

1           25.    The method of claim 24, wherein the user application information record further  
2 includes a last login field indicating the last time the user used the particular application, and a  
3 last message identification field indicating the last message displayed to the user in connection  
4 with the particular application.

1           26.    The method of claim 24, further comprising the step of updating a particular  
2 application in accordance with at least one of the application version field and the download date  
3 field.

1           27.    The method of claim 25, further comprising the step of displaying a next message  
2 to the user in accordance with at least one of the last login field and the last message  
3 identification field.

1           28.    The method of claim 1, further comprising the step of generating an application  
2 tracking record which contains information regarding application use, the application tracking  
3 record including the user identification code or a similar unique identifier associated with the  
4 user, a date field representing the date of a particular record, an event code field indicating a  
5 particular type of event for each application, and a count field indicating the number of times a  
6 particular event has occurred for a particular application.

1           29.    The method of claim 28, further comprising the step of incrementing the count  
2 field for each occurrence of a particular event in connection with each execution of a client  
3 application.

1           30.    The method of claim 1, further comprising the step of generating a message queue  
2 record indicating a list of messages to be displayed to the user, the message queue record  
3 including the user identification code or a similar unique identifier associated with the user, a  
4 behavior type field indicating a user behavior for which messages in the queue will be  
5 transmitted to the user, a message number field indicating a sequential number assigned to each  
6 message, a messages field which indicates the list of messages to be transmitted to the user, and a  
7 URL field indicating a web address to be transmitted to the user.



1           31.    The method of claim 30, wherein the message queue record further includes a  
2   mode indication indicating whether the message will be displayed as a popup window or whether  
3   the application associated with the message will be pulsed when the message is transmitted to the  
4   user.

1           32.    The method of claim 30, further comprising the following steps:  
2                    requesting a message to be displayed to the user in accordance with a welcome  
3   wait interval which indicates an amount of time to wait before requesting a next display message  
4   from the message queue; and  
5                    selecting a message to be displayed to the user in accordance with the  
6   identification of the user and the user's behavior type.

1           33.    The method of claim 32, further comprising the step of transmitting the selected  
2   message to the user in accordance with an application message interval and displaying the  
3   selected message in accordance with the user's display preferences.

1           34.    The method of claim 1, further comprising the step of generating an activity log  
2   file which records user activities, the activity log file including a time field indicating when the  
3   activity log file was created, the user identification code or a similar unique identifier associated

4 with the user, a user IP field indicating the user's last internet connection address, and an activity  
5 field indicating a description for a particular user activity.

1 35. The method of claim 1, further comprising the step of utilizing an external  
2 interface to interface with other systems and processes.

1 36. The method of claim 1, further comprising the step of installing said application  
2 as a shortcut on the user's desktop.

1 37. The method of claim 1, further comprising the step of installing said application  
2 in the user's program files menu.

1 38. The method of claim 1, further comprising the step of installing said application  
2 in the user's start menu.

1 39. The method of claim 1, further comprising the step of installing said application  
2 as a tray icon.

1           40.    The method of claim 1, further comprising the step of optimizing the display of  
2   website information by dynamically configuring the client application in order to present website  
3   information in accordance with the user's history and preferences.

1           41.    The method of claim 1, further comprising the step of tracking user activity in  
2   connection with locations that are specified in URL format but which are not URL locations.

1           42.    The method of claim 41, wherein said locations that are specified in URL format  
2   include one of networked files and networked resources.

1           43.    The method of claim 1, further comprising the step of calculating user behavior  
2   for a plurality of users.

1           44.    The method of claim 1, further comprising the step of calculating user behavior  
2   for an individual user in real-time.

1           45.    The method of claim 1, further comprising the steps of performing at least one  
2   data count based on the user's prior usage history, and weighting the at least one data count to  
3   adjust the relevance of the at least one data count to produce a running total score for at least one  
4   website viewed by the user.

1           46.    The method of claim 45, further comprising the step of adjusting the running total  
2 score in accordance with an amount of time the user spent at at least one website included in the  
3 count.

1           47.    The method of claim 45, further comprising the step of determining the user's  
2 behavior by selecting the website with the highest running total score.

1           48.    The method of claim 45, further comprising the step of determining the user's  
2 behavior by selecting the website with the second highest running total score in the event that the  
3 user does not have a client application corresponding to the website with the highest running  
4 total score.

1           49.    The method of claim 1, further comprising the step of associating a single client  
2 application or website with a plurality of users.

1           50.    The method of claim 1, further comprising the step of associating a single user  
2 with a plurality of client applications or websites.

1           51.    The method of claim 1, further comprising the step of utilizing a plurality of  
2 different varieties of client applications for a single website and a single user.

1           52.    The method of claim 51, wherein said plurality of different client applications  
2 includes client applications with increased functionality and client applications with increased  
3 speed.

1           53.    The method of claim 1, further comprising the step of transmitting customized  
2 messages to a user in accordance with the user's usage.

1           54.    The method of claim 53, wherein the customized messages include at least one of  
2 promotional information, advertisements, and news.

1           55.    A method for dynamically providing information to a user via a visual display  
2 associated with a user computer, the method comprising the following steps:

3                   (a)    at the user computer, requesting from a remote server configuration  
4 information associated with a website being viewed by said user;

5                   (b)    reconfiguring the visual display in accordance with the configuration  
6 information;

7 (c) transmitting usage information associated with the website being viewed  
8 by the user to the remote server; and

9 (d) repeating steps (a), (b), and (c) for each website being viewed by the user.

1 56. A computer readable medium encoded with processing instructions for  
2 performing a method for dynamically providing information to a user via a visual display  
3 associated with a user computer, the method comprising:

4 assigning the user a user identification code;  
5 assigning an application code to at least a first website and a second website to be  
6 viewed by said user;

7 recording the user's activity associated with said first and second websites by  
8 monitoring said user identification code and said application code;

9 determining the user's viewing preference associated with said first website based  
10 on the user's activity associated with said first website;

11 determining the user's viewing preference associated with said second website  
12 based on the user's activity associated with said second website; and

13 dynamically adjusting the user's display in accordance with the user's preference  
14 associated with the website being viewed by the user.

1           57.    A computer readable medium encoded with processing instructions for  
2 performing a method for dynamically providing information to a user via a visual display  
3 associated with a user computer, the method comprising:

- 4                   (a)    at the user computer, requesting from a remote server configuration  
5 information associated with a website being viewed by said user;  
6                   (b)    reconfiguring the visual display in accordance with the configuration  
7 information;  
8                   (c)    transmitting usage information associated with the website being viewed  
9 by the user to the remote server; and  
10                  (d)    repeating steps (a), (b), and (c) for each website being viewed by the user.

1           58.    An apparatus for dynamically providing information to a user via a visual display  
2 associated with a user computer, comprising:

- 3                   a processor; and  
4                   a memory storing processing instructions for controlling the processor, the  
5 processor operative with the processing instructions to:  
6                   assign the user a user identification code;  
7                   assign an application code to at least a first website and a second website  
8 to be viewed by said user;

9 record the user's activity associated with said first and second websites by  
10 monitoring said user identification code and said application code;  
11 determine the user's viewing preference associated with said first website  
12 based on the user's activity associated with said first website;  
13 determine the user's viewing preference associated with said second  
14 website based on the user's activity associated with said second website; and  
15 dynamically adjust the user's display in accordance with the user's  
16 preference associated with the website being viewed by the user.

1 59. An apparatus for dynamically providing information to a user via a visual display  
2 associated with a user computer, comprising:

- 3 a processor; and  
4 a memory storing processing instructions for controlling the processor, the  
5 processor operative with the processing instructions to:
- 6 (a) at the user computer, request from a remote server configuration  
7 information associated with a website being viewed by said user;
  - 8 (b) reconfigure the visual display in accordance with the configuration  
9 information;
  - 10 (c) transmit usage information associated with the website being  
11 viewed by the user to the remote server; and



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